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09/965,525	09/26/2001	Alejandro Schwartzman	CISCP236/114748	3761
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Weaver Austin Villeneuve & Sampson LLP			EXAMINER	
P.O. BOX 70250			BAIG, SAHAR A	
OAKLAND, CA 94612-0250				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USPTO@wavsip.com

Office Action Summary

Application No.

09/965,525

Applicant(s)

SCHWARTZMAN ET AL.

Examiner

SAHAR A. BAIG

Art Unit

2424

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-32 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 18-26 rejected under 35 U.S.C. 101 because claiming of a computer software product is not patentable.

Claim(s) 18-26 is/are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 18 is drawn to functional descriptive material recorded on a computer software product.. Normally, the claim would be statutory. However, the specification, at page 16-17 defines the claimed computer readable medium as encompassing statutory media such as a "ROM", "hard drive", "optical drive", etc, as well as **non-statutory** subject mater such as a "signal", carrier wave, and airwaves.

A "signal" embodying functional descriptive material is neither a process nor a product (i.e., a tangible "thing") and therefore does not fall within one of the four statutory classes of § 101. Rather, "signal" is a form of energy, in the absence of any physical structure or tangible material.

Because the full scope of the claim as properly read in light of the disclosure encompasses non-statutory subject matter, the claim as a whole is non-statutory. The examiner suggests amending the claim to include the disclosed tangible computer readable media, while at the same time excluding the intangible media such as signals,

carrier waves, airwaves, etc. Any amendment to the claim should be commensurate with its corresponding disclosure. **Since the amended claims do not commensurate with the specifications the rejection under 35 U.S.C. 101 is maintained.**

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1-4, 6, 9-12, 14, 17-21, 23, and 26, rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al., U.S. Patent Application Publication No. 2002/0141544 in view of Stetson et al., U.S. Patent No. 6,552,614, in further view of White et al. U.S. Patent No. 5,983,273.

Regarding Claim 1, Brown discloses a method comprising:

identifying a component included in a cable modem (e.g., upstream transmitter formed of 35, 85, 87 of fig. 1; [0017]); obtaining parameter information comprising power characteristics of the component from nonvolatile memory (fig.3, item 205, [0022]; configuring the operating system running on the cable modem to operate the component ([0027]) and report power characteristics to an upstream device (fig.3, item 225; [0022], [0019]). However Brown fails to explicitly describe the memory as nonvolatile, in an analogous art, Stetson discloses a cable modem

comprising a non volatile memory (Col. 6 line 33-38). Therefore it would have been obvious to one of ordinary skill in the art to implement the use of non-volatile memory is the method of Brown to enable improved cable modem performance. The combined methods of Brown and Stetson fail to teach configuring of the operating system to operate a replacement component for the cable modem. In an analogous art, White discloses a method of detecting the presence of a replacement component (fig. 7, item 705), obtaining parameter information comprising power characteristics of the component (fig.7, item 715) from nonvolatile memory (col. 4 lines 8-15); configuring the operating system running on the cable modem to operate the component (col. 3 lines 56-61) and report power characteristics to an upstream device (fig. 7, item 720).

Therefore it would have been obvious to one of ordinary skill in the art to combine the teachings of Brown, Stetson, and White to allow cable modem component interchangeability for the cost saving benefit to the consumer.

As to claim 2, Brown discloses the method of claim 1, wherein the operating system is a cable modem operating system (e.g., [0014]).

As to claim 3, Brown discloses the method of claim 2, wherein that the component is a tuner (i.e., upstream transmitter formed of 35, 85, 87 of fig. 1; [0015], [0017]).

As to claim 4, Brown discloses the method of claim 3, wherein operating the component comprises varying RF transmission power ([0017]).

As to claim 6, Brown discloses the method of claim 3, wherein parameter information comprises band crossover frequency information ([0016]).

As to claim 9, Brown discloses the method of claim 3, wherein parameter information comprises component address information (setting control registers of components, [0015], [0016]).

Regarding claims 10-12, 14, and 17, Brown discloses a system (fig. 1) comprising means for performing the corresponding method steps discussed above with respect to claims 1-4, 6, and 9.

Regarding claims 18-21, 23, and 26, Brown further discloses computer code ([0021]) for performing the corresponding method steps discussed above with respect to claims 1-4, 6, and 9.

5. Claims 5, 7 and 8, rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al., U.S. Patent Application Publication No. 2002/0141544 in view of Stetson

et al., U.S. Patent No. 6,552,614, in further view of White et al. U.S. Patent No. 5,983,273, in further view of Lapid, U.S. Patent No. 6,687,489.

Regarding claims 5, 7 and 8, the combined teachings of Brown, Stetson and White discloses the methods and apparatus of claims 3, 11, 20, and 35, but fails to disclose parameter information comprising IF output information, IF AGC Gain Threshold information, or RF AGC Gain Threshold information. However, in an analogous art, Lapid discloses such parameters (e.g., IF/RF TOP and AGC response parameters) may be used for temperature compensation in a cable modem tuner (col. 4, 11. 1-51). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the parameter information of Brown, Stetson, and White to include the IF/RF TOP and AGC response parameters taught by Lapid, thereby enabling improved the cable modem tuner performance.

6. Claims 27-32 rejected under 35 U.S.C. 103(a) as being unpatentable over Stetson et al., U.S. Patent No. 6,552,614, in view of Miller et al. U.S. Patent Application Publication No. 2003/0046690.

Regarding claims 27 and 30, Stetson discloses a cable modem (fig. 2, 100) (and corresponding method) comprising: a tuner (fig. 2, items 112, 122, 114, 116); a non-volatile memory (fig.2, item 128) operable to provide power characteristics

associated with the tuner to a cable modem operating system (col. 3, line. 54-59, col. 1, line 31-35), wherein the cable modem operating system uses (accounts for) the power characteristics to drive the tuner to transmit at a desired power level (col. 6, line. 7-26). Although Stetson fails to disclose replacement tuners, such a limitation is well known in the art and is taught by Miller. Miller discloses a CMTS system operable to replace components [switching tuners 0046]. Therefore it would have been obvious to one of ordinary skill in the art to combine the teachings of Stetson and Miller to allow cable modem component interchangeability.

As to claims 28 and 31, Stetson discloses the cable modem and corresponding method of claims 27 and 30, wherein the nonvolatile memory is flash memory (col. 6, line15-20).

As to claims 29 and 32, Stetson discloses the cable modem and corresponding method of claims 28 and 31, wherein the tuner is a cable modem RF tuner (col. 4, line.5-20).

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAHAR A. BAIG whose telephone number is (571)270-3005. The examiner can normally be reached on Monday-Friday (8:00 - 4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher Kelley/
Supervisory Patent Examiner, Art
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SAB